

## SECTION 535

### SUPPLY AND INSTALLATION OF TRAFFIC SIGNAL FOUNDATIONS

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#### **535.01 SCOPE**

This specification covers the requirements for the supply and installation of concrete foundations for traffic signal poles, both post top and cantilever styles.

#### **535.02 GENERAL**

Concrete shall conform to the requirements for substructure concrete as stipulated in Section 904.

All concrete reinforcement shall be in accordance with Section 905.

All formwork shall be in accordance with Section 907. The forms shall be held to the established lines and grades, and upper edges shall conform to the grade established by the Owner's Representative.

As soon as the concrete has been placed and consolidated, it shall be struck off and screened to the established grade. The surface shall be immediately floated with a wood or metal float to remove ridges and fill the voids remaining on the surface following screening. The concrete shall not receive any floating or working when bleed water or free water, is present on the surface. The surface shall not be permanently worked or subsequently overworked to cause excessive fines and water to be forced to the surface.

The method and materials used to cure and protect the concrete shall be in accordance with the provisions of Section 904

The anchorage assembly shall be accurately orientated in order that future pole brackets and signal heads will be right angles to the roadway being served. The template shall be

firmly positioned and fixed in a level position before concrete is placed. The template shall remain in place until the pole is to be erected.

Steel reinforcing bolts and ties shall be as shown on Forms 1286 or 1287, as the case may be.

Conduit sleeves shall be firmly fixed to formwork or steel reinforcing prior to the pouring of concrete.

All sleeve openings not to be utilized on this contract shall be plugged using approved PVC plugs.

All components shall be accurately placed, secured and supported in a manner approved by the Owner's Representative so that there can be no shifting or deflection of the components due to the placing of concrete and such other loads as may be superimposed during construction.

All rigid PVC connections shall be made with solvent cement.

Immediately after concrete has been poured, the contractor, by using a suitable size testing mandrel, or by other means acceptable to the Owner's Representative, shall prove the complete system to ensure that conduits are clean and free of obstructions.

The ends of the ducts shall be capped with plastic plugs after a twisted nylon fish line has been pulled through each duct and a 1.5 metre length brought out at each end past the plastic plugs and left coiled for future use.

All exposed studs and appropriate nuts shall be thoroughly cleaned and smeared with a suitable anti-seizer lubricating component to prevent the nuts from freezing to the studs.

One nut shall be turned down on each anchor stud.

### **535.03 MEASUREMENT FOR PAYMENT**

Measurement for payment for Supply and Installation of Traffic Signal Foundations shall be by the number of Traffic Signal Foundations of each type installed.

### **535.04 BASIS OF PAYMENT**

Payment at the contract price for Supply and Installation of Traffic Signal Foundations will be compensation in full for all plant, labour, equipment and material use required to supply

and install a traffic signal foundation including: excavation, supply and installation of formwork, reinforcing, concrete, anchor bolts, conduits, elbows and fish lines.